DOCUMENT RESUME

ED 287 133 CG 020 262

AUTHOR Inglehart, Marita; And Others
TITLE Possible Selves and Satisfaction with Career Choice--A Longitudinal Analysis.
PUB DATE Aug 87
NOTE 19p.; Paper presented at the Annual Convention of the American Psychological Association (95th, New York, NY, August 28-September 1, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Career Choice; *Followup Studies; Higher Education; *Life Satisfaction; *Medical Students; *Physicians; Self Actualization; *Self Concept
IDENTIFIERS *Possible Selves

ABSTRACT

Possible selves are concrete images of what people think they might become, what they would like to become, and what they are afraid of becoming in the future. It was hypothesized that the satisfaction with achieving the possible self will be higher the more the person has focused on this possible self and the more emotionally involved the person has been with the possible self in the past. These hypotheses were tested in a 10-year panel study of 99 medical doctors which investigated the influence of long-term self-relevant goals (possible selves) on subjective well-being after achieving these goals. The results provided support for the first hypothesis: the degree to which students had focused on becoming a physician in their first year of medical school significantly predicted satisfaction with medicine as a career after achieving this possible self 10 years later. The second hypothesis, however, was not supported: the degree to which these students were emotionally affected by these possible selves when starting medical school had no influence on their later satisfation with medicine as a career. The findings support the hypothesis that the two aspects of possible selves, their cognitive structure and their affective valence, function independently. These results provide evidence for the psychological significance of the concept of possible selves. (NB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED287133

Possible Selves and Satisfaction with Career Choice - A Longitudinal Analysis

Marita Inglehart, Elissa Wurf, Donald R. Brown

& William Moore

The University of Michigan

CG 020262

Paper presented at the American Psychological Association Meeting, August 28th - September 2nd, in New York.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Marita Inglehart

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

Abstract

The influence of longterm self-relevant goals (possible selves) on subjective well-being after achieving these goals is investigated. We suggest that the satisfaction with achieving the possible self will be higher (a) the more the person had focused on this possible self, and (b) the more emotionally involved the person had been with the possible self in the past. These hypotheses are tested in a 10-year panel study of 99 medical doctors. The results provide support for the first hypothesis: the degree to which students had focused on becoming a physician in their first year of medical school significantly predicted satisfaction with medicine as a career after achieving this possible self ten years later. The second hypothesis, however, was not supported: the degree to which these students were emotionally affected by these possible selves when starting medical school, however, had no influence on the later satisfaction with medicine as a career. In addition, LISREL analyses support the hypothesis that the two aspects of possible selves (their cognitive structure and their affective valence) function independently. These results provide evidence for the psychological significance of the concept of possible selves.

Introduction

Recent theories of personality focus on understanding how an individual's motivations are represented and how these representations function in long-term goal achievement (e.g., Cantor & Kihlstrom, 1986; Klinger, 1977; Little, 1983). Representations of the self seem particularly important in motivation; they have been shown to mediate both which goals one chooses to pursue (Niedenthal, Cantor, & Kihlstrom, 1985; Schlenker, 1985; Wicklund & Gollwitzer, 1983), and how hard and long one perseveres in achieving them (Bandura, 1986; Harter, 1983; Ruvolo & Markus, 1986). Possible selves (Markus & Nurius, 1986) are representations of the self achieving a particular goal. They are concrete images of what people think they might become, what they would like to become, and what they are afraid of becoming in the future (Markus & Nurius, 1986). Possible selves are of essential importance in the motivation process. They provide the person with a clear goal to strive for; and they concentrate the person's emotional energy on pursuing the goal (Inglehart, Markus, Brown & Moore, 1987).

Possible selves may influence not only the process of striving for goal achievement; but they may also importantly influence the affective reaction the person has to achieving goals. Commitment to achieving positive goals may influence a variety of affective outcome variables (e.g., affect, depression, stress) (Antonovsky, 1979; Emmons, 1986; Palys & Little, 1985). People who are committed to achievable goals that they value highly experience more positive affect and life satisfaction (Emmons, 1986; Klinger, 1977; Palys & Little,

1986), and may be more resistant to negative affect and the negative physiological correlates of stress, than those people who are less committed to goals, or who consider their important goals to be unachievable (Antonovsky, 1979; Bandura, 1986; Kobasa, 1982).

The goals of the current study are twofold. The first is to investigate the process by which possible selves influence motivation. In this paper, we present a LISREL model that shows that two different aspects of possible selves, their cognitive structure and their affective value, influence satisfaction with goal achievement. The second goal of this study is to investigate the effects of these two factors on how the person feels about achieving a possible self.

The Role of Possible Selves in the Process of Motivation

Markus & Nurius (1986) postulate that possible selves function as incentives for future behavior. They argue that motives are dispositions within an individual to strive to approach a particular class of positive incentives (goals) or to avoid a particular class of negative incentives (threats). Possible selves represent these motives "by giving specific cognitive form to the end states (goals and threats), to the associated plans or pathways for achieving them, and to the values and affect associated with them." (Markus & Nurius, 1986, p. 961).

This short statement clearly implies that possible selves motivate future behavior. But how exactly does this process occur? Markus and Nurius's statement suggests that there are actually three separate components of interest here. The first component refers to the final goals, the second to the way these goals can be achieved, and the third to the values and affect connected with the possible selves. These three components can be related to

two different aspects of motivation, namely on one hand to the cognitive or structuring aspect of motivation, and on the other hand to the affective or energizing aspect.

The cognitive contribution of possible selves is that they provide a goal and that they structure the pathway to it. Possible selves provide a specific image or conception of the self in the desired end-state. These representations of the self achieving a goal are useful in organizing and initiating action. If one person imagines him/herself as saving lives as a surgeon, while another person thinks of helping children as a pediatrician, then these two different possible selves will provide the two persons not only with two different goals to strive for, but they will also clearly structure the way to reach these goals. The choice of medical school courses, clinical clerkships and internships, for example, will be most likely be influenced by these different possible selves. This aspect of the possible selves will be referred to as the structuring component of possible selves.

Possible selves can also motivate the person to pursue actions by providing the energy to persevere in attempts at goal attainment. Possible selves have values and affect connected with them. A person who imagines him/herself as saving another person's life with an ingenuous new surgical technique might receive a great deal of positive affect from this image. This positive affect might carry the person on the way to reaching the future goal of becoming a surgeon. This aspect of possible selves is described as the energizing component of possible selves.

This two factor model of motivation suggests that possible selves influence the motivation by (a) structuring the goal and pathways to achieve it and by (b) energizing the person to persevere in pursuing these goals. The

two factor model suggests that these two components of possible selves motivate the person independently from each other, but that they are both necessary for goal achievements. A one factor model of motivation, on the other hand, would argue that possible selves per se motivate a person to achieve an image of one self in the future, without further differentiating the exact ways in which this motivational influence would take place.

In a study by Inglehart, Markus, Brown & Moore (1987) the one and two factor models were compared with respect to their ability to predict academic achievement in Medical School. Clear support for the two factor model was found. The more the medical students had focused on becoming an M.D. before starting medical school (structuring component), the better was their academic achievement in the third year. In addition, the more these students had imagined their future careers as satisfying and as attractive (energizing component), the greater was their later academic achievement.

This study specifically investigates whether the extent to which a person is motivated to reach a certain possible self will influence his or her affective reaction to achieving it.

The Effect of Achieving Possible Selves on Satisfaction with Career Choice

We suggest that the amount of satisfaction a person experiences when goals are attained will vary both with the cognitive structure of the person's possible selves and with the amount of energy invested in achieving them. This should happen both because cognitive structures and affective involvement with goals may increase the probability of goal attainment, indirectly leading to greater satisfaction; and because the degree of cognitive structure and high affective value attached to possible selves directly facilitate their

enjoyment once achieved.

The data from the current study do not allow us to test the hypothesis that possible selves facilitate goal attainment, since everybody who participated in the study did become a doctor and there is no variance in the goal attainment variable. But there is a great deal of motivation literature that supports this hypothesis. Much of the literature on motivation is devoted to showing that various affective and cognitive factors enhance both the motivation to achieve a goal and, in turn, the likelihood that it will actually be achieved. With regard to affective factors, virtually every theory of motivation suggests that the incentive value or attractiveness of a goal influences how hard an individual will strive to achieve it; and many personality-based theories of motivation suggest that different individuals will vary in what they personally will find attractive (e.g., McClelland, 1953). In addition, Wicklund and Gollwitzer (1983) have recently shown that how affectively involved or committed a person is to a particular desired self-definition influences how hard or long one will persevere to attain it. With regard to cognitive factors, the literature on expertise suggests that people with well-developed cognitive structures have well-developed knowledge which generally helps them to better achieve their goals (Cantor & Kihlstrom, 1987). Thus, both affective involvement and cognitive structuring may facilitate goal attainment.

Goal attainment in turn may increase satisfaction. Our research focuses on this latter link, on how attaining a goal influences how one feels about it. In particular, we are interested in how the affective involvement with a goal and the cognitive structure of it influence satisfaction. With respect to the cognitive structure of a goal, work on cognitive complexity suggests

that (a) the less complexly a person thinks about him or herself (e.g., the fewer roles a person considers to describe the self), the more extreme the person's affective responses will be (Linville, 1986); and (b) the more well-developed a particular role or concept is, in terms of being well-elaborated and central to thinking about the self, the more extreme the person's affective reactions will be (Millar & Tessar, 1986). These results suggests that a person who considers only one career (in this case, medicine) as a possible self, and who has a well-elaborated sense of the self as a doctor, will be more satisfied with having actually attained the goal.

With respect to the affective involvement with a goal, work on long-term, higher order goals suggests that people who are committed to achieving personally important, achievable goals feel happier and are more satisfied than those people who lack important commitments, or who perceive their goals as unachievable (Brickman, 1987; Emmons, 1986; Klinger, 1977; Palys & Little, 1985). The process of working to achieve important goals in and of itself enhances well-being; and past attainments were, in one study at least, especially related to positive affect (Emmons, 1986). These results imply that people who attach greater importance or affective value to becoming a doctor should experience greater satisfaction with having actually become one.

In sum, we predict that a person who is clearly focused on one possible self and who has invested a large degree of emotional energy in this possible self will experience more satisfaction with the achieved goal than a person with a less focused possible self and less investment in it.

Procedure

We tested our hypothesis on a sample of 99 medical doctors. These subjects were graduates of the University of Michigan Medical School. They

entered the program in 1976 and graduated in 1980. In 1976, they answered a self-administered questionnaire which contained questions concerning their future career in medicine. Two of these questions will be used in our analysis as indicators of the cognitive aspects of possible selves (How many other fields besides medicine did you consider in the last months? When did you definitely decide on medicine as a career?); and two of these questions will be used as indicators of the affective side of possible selves (How satisfying will medicine be as a career? How certain are you that you want to become a medical doctor?). The answers to these questions were given on five-point scales, with a value of one always indicating a high degree of being focused or committed to the possible self, and a value of 5 indicating a low degree of being focused or committed to the possible self.

Six years after finishing medical school (in 1986), the same persons answered another self-administered questionnaire that was sent to them in the mail. In this questionnaire they were asked to indicate their degree of satisfaction with medicine as a career. Responses ranged from 1 (= very satisfied) to 5 (= very dissatisfied). These answers were used as an indicator for our endogenous variable, namely satisfaction with achieving the possible self of becoming a doctor.

In order to test whether two separate aspects of possible selves influence subjective well-being (two factor model) or whether possible selves influence the satisfaction with achieving the imagined self holistically (one factor model), two linear structural equations systems were tested against each other. Figure 1 presents the one factor model of the motivational influence of possible selves on later satisfaction with medicine as a career. Figure 2 presents the two factor model. This second model states that the

structuring and the energizing components of the possible selves separately influence the later satisfaction with medicine as a career. These two models are compared with each other in a structural equations analysis. Descriptive analyses comparing the career satisfaction of people at each level of the cognitive structure and affective involvement factors were also conducted.

-- Include Figure 1 and 2 about here --

Results

LISREL Model

The adjusted goodness of fit of model 1 is 0.897 (x^2 =8.26; d.f.=5) and the adjusted goodness of fit of model 2 is 0.928 (x^2 =3.49; d.f.=3). Model 2, the two factor model of motivation, fits the data significantly better than model 1, the one factor model (difference in x^2 =4.77; difference in d.f.=2; $p<.10$). This result supports the assumption that there are two separate components, namely a structural and an energizing component of possible selves. A closer look at Model 2 reveals a rather striking finding: When predicting satisfaction with medicine as a career, it is the structuring and not the energizing component that influences the subjective well-being after having achieved the possible self. It can be seen in figure 2 that the more the person had focused on the possible self, the greater was the satisfaction with medicine as a career. But unexpectedly, the degree of positive affect connected with the possible self in the past did not predict the later satisfaction with medicine as a career.

Mean levels of Career Satisfaction

In order to better describe these find ngs, the average satisfaction

scores at the different levels of being focused or committed to the possible self in the past are provided in figure 3. In general, the trend of the results suggests that those physicians who, at the beginning of medical school, were either more focused or more affectively involved with becoming a doctor, experience more satisfaction with medicine as a career now that their goal has been achieved.

-- Include figure 3 about here --

Discussion

The goal of the current study was to examine the impact of possible selves, or images of the self in a future, desired state, on satisfaction with goal achievement. These questions were studied as part of a panel study of medical students that follows them from their entry to medical school in 1976, to their current standing as physicians in 1986. Using these data, a model of the processes by which possible selves have their effect was developed; this model suggests that two separate aspects of possible selves, their cognitive structure and their affective value, need to be taken into account in order to understand how possible selves have their effect. Analyses conducted on each of these factors suggest that the more focused a person is on achieving a possible self, and the more affective value the person attaches to goal achievement, the more satisfied the person will be with goal attainment.

With regard to the model, the results generally support the reasoning that the structuring and energizing aspects of possible selves should be separated when studying their impact. These results are consistent with the earlier study by Inglehart et. al. (1987), who found that both aspects of possible selves were good predictors of later academic achievement. However, the results from the current study differ slightly, in that the cognitive

structure aspect of possible selves, but not the energizing aspect, was significantly associated with career satisfaction.

On one hand, this is a rather surprising finding, because one might argue that the emotional involvement and the expected satisfaction with a possible self should be a good predictor of one's satisfaction with realizing this possible self. That this is not the case might be due to habituation of affective reactions (e.g., Klinger, 1977). This process could reduce the satisfaction of those subjects who had the highest expectations of being satisfied with medicine as a career by confronting them with the not so rosy reality. Consistent with this reasoning, Brickman (1987) reports a longitudinal study of medical students in which he found that commitment to becoming a doctor was greatest during transition points (starting medical school or an internship), and was lower once a goal had been achieved.

In addition, past research that has separated out measures of positive from measures of negative affect, has found that career satisfaction is more strongly related to negative affect than to positive affect (Bradburn & Caplovitz, 1968; Noll, 1969). This suggests that possible selves might more strongly predict career dissatisfaction than career satisfaction. Consistent with this hypothesis, internal analyses of the sources of satisfaction reveal that physicians who had less focused possible selves are more likely than focused doctors to spontaneously mention being stressed as a source of dissatisfaction. Further investigations into these processes are necessary.

On the whole, these findings support the psychological significance of the concept of possible selves. They are especially remarkable for two reasons. First, this study examined the influences of possible selves within a highly selected sample of participants. One can expect that all of the

participants had a clear positive possible self of becoming a physician when entering the medical school program. Slight differences in the focus on this one possible self allowed predictions of differences in satisfaction with this career choice after achieving the possible self. Second, a rather impressive time span is covered by these data. The findings demonstrate that the possible selves when beginning medical school have an impact on satisfaction with medicine as a career ten years later. This persistence of influence of possible selves over such a long period of time provides strong support for the importance of possible selves in shaping people's lives.

References

Antonovsky, A. (1979). Health, stress and coping. San Francisco: Jossey-Bass.

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Bradburn, N. M., & Caplovitz, D. (1965). Reports on happiness: A pilot study of behavior related to mental health. Chicago: Aldine.

Brickman, P. (1987). Commitment, conflict, and caring. Englewood Cliffs, NJ: Prentice Hall.

Cantor, N. & Kihlstrom, J. (1986). Personality and social intelligence. Englewood Cliffs, N.J.: Prentice Hall.

Emmons, R. (1986). Personal striving: An approach to personality and subjective well-being. Journal of Personality and Social Psychology, 51, 1058-1068.

Harter, S. (1983). Developmental perspectives on the self-system. In M. Hetheringtom (Ed.), Handbook of child psychology (Vol 4). New York: Wiley.

Inglehart, M., Markus, H., Brown, D. R. & Moore, W. (1987). The impact of possible selves on academic achievement: A longitudinal analysis. Paper presented at the Midwestern Psychological Association Meeting in Chicago.

Klinger, E. (1977). Meaning and void. Minneapolis: University of Minnesota Press.

Kobasa, S. C. (1982). The hardy personality: Toward a social psychology of stress and health. In J. Suls & G. Sanders, (Eds.), Social psychology of health and illness. Hillsdale, NJ: Erlbaum.

Linville, P. Self-complexity and affective extremity: Don't put all your eggs in one cognitive basket. Social Cognition, 3, 94-120.

Little, B. W. (1983) Personal projects: A rationale and method for investigation. Environmental Behavior, 15, 273-305.

McClelland, D. C. (1953). Personality. New York: Dryden.

Markus, H. & Nurius, P. (1986). Possible Selves. American Psychologist, 41, 954-969.

Millar, M. G., & Tesser, A. Thought-induced attitude change: The effects of schema structure and commitement. Journal of Personality and Social Psychology, 51, 259-269.

Niedenthal, P. M., Cantor, N. & Kihlstrom, J. F. (1985). Prototype matching. A strategy for social decision making. Journal of Personality and Social Psychology, 48, 575-584.

Noll, C. E. (1969). Adjustment in major roles: II. Work. In N. M. Bradburn, The structure of psychology psychological well-being. Chicago: Aldine.

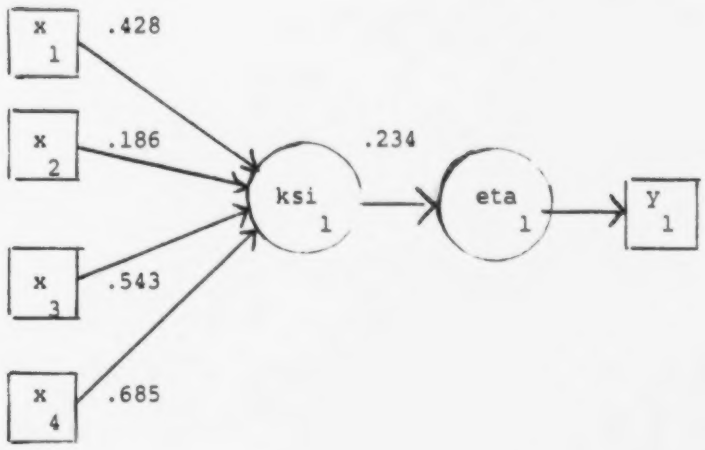
Palys, T. S. & Little, B.K. (1983) Perceived life satisfaction and the organization of personal project systems. Journal of Personality and Social Psychology, 44, 1221-1230.

Ruvolo, A. P. & Markus, H. (1986). Possible selves and motivation. Paper presented at the Annual Meeting of the American Psychological Association, Washington, D.C.

Schlenker, B. R. (1985). Identity and self-identification. In B. R. Schlenker (Ed.), The self and social life, pp. 65-99. New York: McGraw-Hill.

Wicklund, R. A. & Gollwitzer, P. M. (1982). Symbolic Self-completion. Hillsdale, N. J.: Erlbaum.

Figure 1: The one factor model of motivational impact of possible selves on psychological well-being after realizing the possible self



Legend:

x 1 = How long ago did you definitely decide on a career in medicine? (1 = early childhood to 7 = after college)

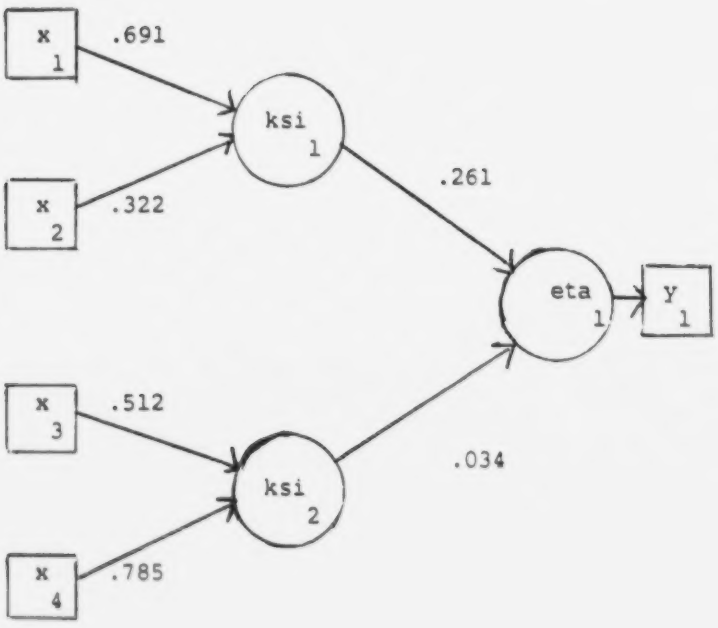
x 2 = How many other possible fields besides medicine have you been seriously considering in recent months? (1 = medicine is the only field to 5 = four or more)

x 3 = How satisfying will medicine be as a career? (1 = It's the only career that could really satisfy me to 5 = It's a career that I probably won't find satisfying)

x 4 = How certain are you that you want to enter medicine as a career? (1 = very certain to 5 = not at all certain)

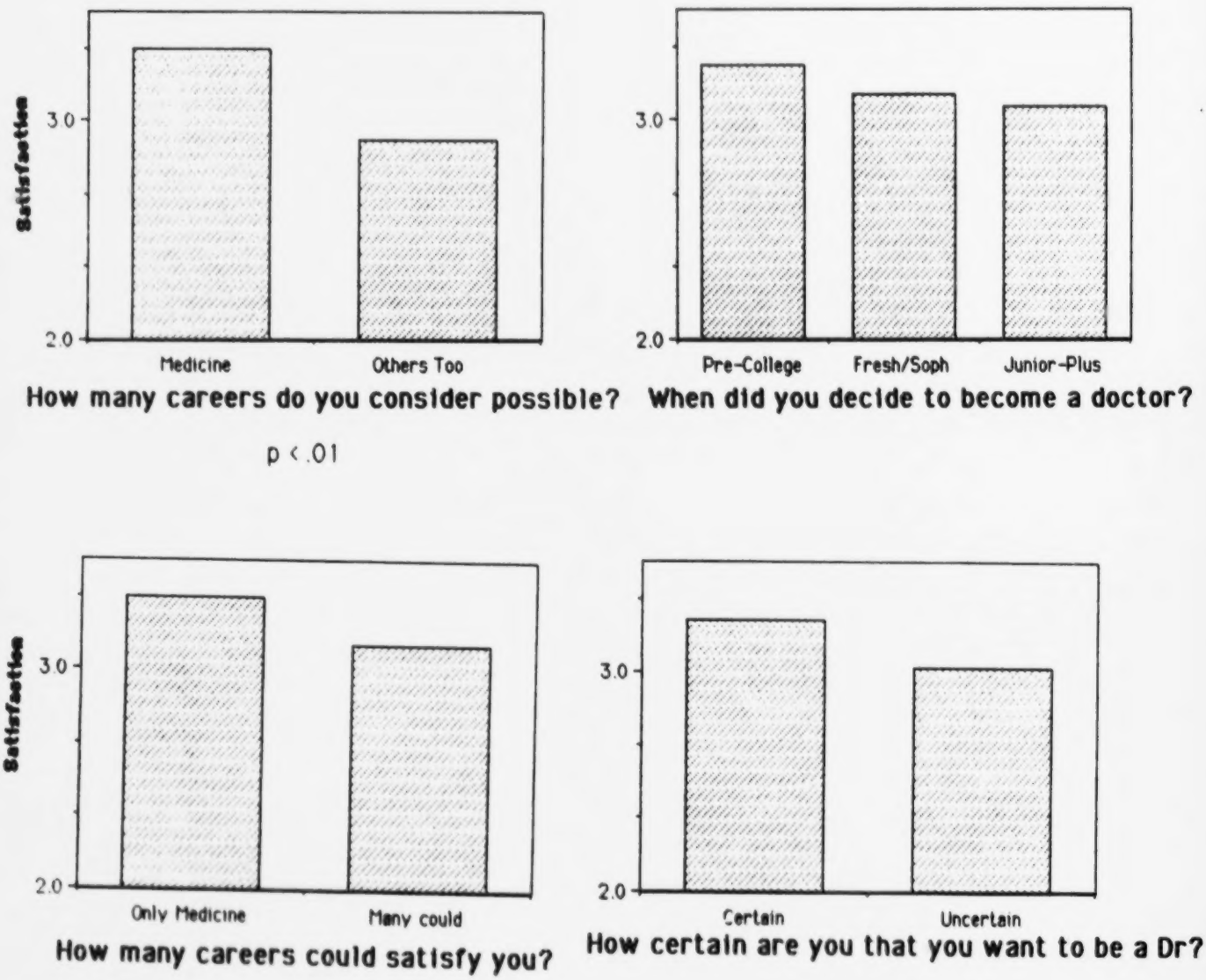
y 1 = At this time, how satisfied are you that you selected medicine as a career? (1 = very satisfied to 5 = very dissatisfied)

Figure 2: The two factor model of motivational impact of possible selves on psychological well-being after realizing the possible self.



Legend: See figure 1!

Figure 3: Average satisfaction with medicine as a career under the different levels of being focused and committed to the possible self of becoming an M.D.



1 The values of the satisfaction scale were reversed in order to make the graphs more comprehensible.